

## CLAIMS

What is Claimed is:

- 1        1. An apparatus for providing true geodetic coordinates of a target position (TGT) using an  
2                image database comprising:  
3                a portable personal computing device having means to accept input, and output data  
4                and commands; and,  
5                a processor configured to execute a process corresponding to said input, output data  
6                and commands, said process comprising,  
7                        accepting input of true geodetic coordinates of an own position (OP);  
8                        accepting input of raw coordinates of a reference point (RP);  
9                        accepting input of true coordinates of RP from user, said true coordinates of RP  
10                being obtained from said image database;  
11                        computing exact local magnetic declination variance between said raw  
12                coordinates of RP and said true geodetic coordinates of RP;  
13                        accepting input of raw coordinates, inclination and range of said target position  
14                (TGT);  
15                        computing the true geodetic coordinates of TGT utilizing the exact local magnetic  
16                declination variance; and  
17                        outputting the true geodetic coordinates, inclination and range of the TGT .
- 1        2. The apparatus of claim 1 wherein said portable personal computing device comprises a  
2                Compaq (Hewlett-Packard) IPAQ <sup>TM</sup> model 3650.

1        3. The apparatus of claim 1 wherein said image database comprises the Digital Point

2            Positioning Database (DPPDB).

1        4. The apparatus of claim 1 wherein said true geodetic coordinates of said own position

2            (OP) are obtained from said image database, a Global Positioning System (GPS) receiver,

3            an Advanced Targeting Forward Looking Radar (ATFLIR) image, a Low Altitude

4            Navigation and Targeting Infrared for Night (LANTIRN) pod, or the FalconView

5            mapping system.

1        5. The apparatus of claim 1 wherein said geodetic coordinates are in the World Geodetic

2            System 1984 (WGS-84), the Military Grid Reference System (MGRS), or like reference

3            system.

1        6. The apparatus of claim 1 wherein said raw coordinates of a reference point (RP) and said

2            raw coordinates of target (TGT) are obtained utilizing a Laser Range Finder (LRF).

1        7. The apparatus of claim 1 wherein said true coordinates of OP and RP are obtained from

2            said image database.

1        8. The apparatus of claim 1 wherein said true coordinates of OP and RP are obtained from

2            said image database by utilizing the Precision Strike Suite (PSS).

1        9. A method for providing true geodetic coordinates of a target position (TGT) using an  
2                image database comprising:  
3                providing a portable personal computing device having means to accept input, and  
4                output data and commands;  
5                providing a processor configured to process said input and said commands, said  
6                process comprising,  
7                accepting input of true geodetic coordinates of an own position (OP);  
8                accepting input of raw coordinates of a reference point (RP);  
9                accepting true geodetic coordinates of the RP, said true coordinates of RP being  
10              obtained from said image database;  
11              computing exact local magnetic declination variance between said raw  
12              coordinates of RP and said true geodetic coordinates of RP;  
13              accepting input of raw coordinates, inclination and range of said target position  
14              (TGT);  
15              computing the true geodetic coordinates of TGT utilizing the exact local magnetic  
16              declination variance; and  
17              outputting the true geodetic coordinates, inclination and range of TGT.

1        10. The method of claim 9 wherein said portable personal computing device comprises a  
2              Compaq (Hewlett-Packard) IPAQ <sup>TM</sup> model 3650.

1 11. The method of claim 9 wherein said image database comprises the Digital Point

2 Positioning Database (DPPDB).

1 12. The method of claim 9 wherein said true geodetic coordinates of said own position (OP)

2 are obtained from said image database, a Global Positioning System (GPS) receiver, an

3 ATFLIR image, a Low Altitude Navigation and Targeting Infrared for Night (LANTIRN)

4 pod, or the FalconView mapping system.

1 13. The method of claim 9 wherein said geodetic coordinates are in the World Geodetic

2 System 1984 (WGS-84), the Military Grid Reference System (MGRS), or like reference

3 system.

1 14. The method of claim 9 wherein said raw coordinates of a Reference Point (RP) and said

2 raw coordinates of target (TGT) are obtained utilizing a Laser Range Finder (LRF).

1 15. The method of claim 9 wherein said true coordinates of OP and RP are obtained from

2 said image database.

1 16. The method of claim 9 wherein said true coordinates of OP and RP are obtained from

2 said image database by utilizing the Precision Strike Suite (PSS).

1        17. A computer program product, embodied on a computer readable medium, for providing  
2            true geodetic coordinates of a target position (TGT) using an image database comprising:  
3            computer code embedded in a portable personal computer (PC) having a computer  
4            program code causing said PC to interface with a user and with other electronic  
5            medium;  
6            computer code for accepting input and commands and for outputting data;  
7            computer code to execute a process corresponding to said input and commands, said  
8            process comprising,  
9            accepting input of true geodetic coordinates of an own position (OP);  
10          accepting input of raw coordinates of a reference point (RP);  
11          accepting input of true coordinates of RP from user, said true coordinates of RP  
12          being obtained from said image database;  
13          computing exact local magnetic declination variance between said raw  
14          coordinates of RP and said true geodetic coordinates of RP;  
15          accepting input of raw coordinates, inclination and range of said target position  
16          (TGT);  
17          computing the true geodetic coordinates of TGT utilizing the exact local magnetic  
18          declination variance; and  
19          outputting the true geodetic coordinates, inclination and range of TGT.

1        18. The computer program product of claim 17 wherein said portable personal computer (PC)  
2            comprises a Compaq (Hewlett-Packard) IPAQ <sup>TM</sup> model 3650.

1 19. The computer program product of claim 17 wherein said image database comprises the  
2 Digital Point Positioning Database (DPPDB).

1 20. The computer program product of claim 17 wherein said true geodetic coordinates of said  
2 own position (OP) are obtained from said image database, a Global Positioning System  
3 (GPS) receiver, an Advanced Targeting Forward Looking Radar (ATFLIR) image, a Low  
4 Altitude Navigation and Targeting Infrared for Night (LANTIRN) pod, or the  
5 FalconView mapping system.

1 21. The computer program product of claim 17 wherein said geodetic coordinates are in the  
2 World Geodetic System 1984 (WGS-84), the Military Grid Reference System (MGRS), or  
3 like reference system.

1 22. The computer program product of claim 17 wherein said raw coordinates of a reference  
2 point (RP) and said raw coordinates of target (TGT) are obtained utilizing a Laser Range  
3 Finder (LRF).

1 23. The computer program product of claim 17 wherein said true coordinates of OP and RP  
2 are obtained from said image database.

1 24. The computer program product of claim 17 wherein said true coordinates of OP and RP  
2 are obtained from said image database by utilizing the Precision Strike Suite (PSS).